

TRANSMITTAL SHEET

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NAS BRUNSWICK
5090.3a

environmental engineers, scientists,
planners, & management consultants

Date 7/8/87

Job Brunswick Naval

Air Station

To Northern Div. Naval Facilities Eng. Command

U.S. Naval Base

Philadelphia, PA 19112-5094

Att. Mr. Robert Kowalczyk

We are sending	herewith	<input checked="" type="checkbox"/>
	under separate cover	<input type="checkbox"/>
	by messenger	<input type="checkbox"/>

I 1 print(s) each of the following: Meeting Notes from Planning
Meeting, 9:00 AM; 12 June 1987; EPA Region I, Room 307

which are	approved	<input type="checkbox"/>
	approved as noted	<input type="checkbox"/>
	returned to you for correction and resubmittal	<input type="checkbox"/>
	for your information	<input checked="" type="checkbox"/>

cc. M. Hoagland

P. Zabrocki

R. Willey

S. Christopherson

C. Head

D. Webster

D. Eggs

L. Jones

By Jack Hoar

MEMORANDUM

TO: Charlotte Head, EPA Site Manager
FROM: Jack Hoar, CDM/Boston
PROJECT: Brunswick Naval Air Station (BNAS)
SUBJECT: Meeting Notes from Planning Meeting, 9:00 AM; 12 June 1987;
EPA Region 1, Room 307
DATE: June 12, 1987

A meeting was held at EPA's Boston office on Friday, June 12, 1987 at 9:00 AM. The meeting was attended by representatives of the U.S. Environmental Protection Agency (EPA); U.S. Navy; E.C. Jordan (contractors for the U.S. Navy); Maine Department of Environmental Protection (MEDEP); Department of Commerce/National Oceanographic and Aeronautics Administration (DOC/NOAA) and Camp, Dresser & McKee, Inc. (CDM). A complete listing of attendees is attached to this memorandum

The meeting was conducted by Charlotte Head, EPA site manager for the Brunswick Naval Air Station (BNAS) Site and began with an introduction of those attending. An agenda for the meeting was outlined involving an introductory explanation of the various individual sites at the base, a discussion of the work plan prepared by E.C. Jordan and finally development of a meeting schedule for future meetings concerning the Brunswick Naval Air Station Site.

Robert Kowalczyk, Environmental Engineer for the Navy presented an explanation of the Navy Assessment and Control of Installation Pollutants (NACIP) program to show how it compares with EPA's similar program under CERCLA. The NACIP program is implemented in three phases; Initial Assessment Study (IAS), Confirmation Study and Remedial Measures. The Confirmation Study is currently being conducted by E.C. Jordan Co. and involves two steps; (1) Verification and (2) Characterization.

The Navy identified nine (9) individual hazardous waste sites at the BNAS, and the Navy recommends the number of sites requiring further investigation be reduced to seven (7). Those sites identified by E.C. Jordan as requiring further study were 1, 2, 3, 4, 7, 8 and 9. EPA and MEDEP have requested documentation for the closure of sites 5 and 6 to determine if they warrant further study.

The Navy's representatives expressed the goal that current EPA terminology regarding hazardous waste site investigation and remediation, as defined under the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), will be adopted by the Navy. They stated that the EPA RI/FS program terminology will eventually be adopted. Charlotte Head expressed that an interagency agreement regarding site investigation and cleanup procedures would be helpful, and EPA would encourage such an agreement. Dave Webster of EPA made the point that the RI/FS program requires an NCP determination on each individual site, whether it be a no action alternative or not. It was noted that the BNAS was not currently a National Priority List Site, but will likely be listed in the near future.

The next topic of discussion was presented by Sharon Christopherson of the NOAA. The specific concerns she presented involved contaminant threats to the anadromous fish population of the Androscoggin River and contamination of associated salt water tidal flats. Sites 1, 2, 3, 8 and 9 were identified as potential sources of contamination of concern to the NOAA. A summary of the NOAA concerns was presented, including ground and/or surface water transport of contaminants to the river or tidal flats, sediment transport and bioaccumulation. A specific concern involved NOAA perceived inadequacies in the work plan concerning sampling for each site, types of samples, and sample locations. All sediment samples need to be analyzed for the full set of organic and trace element priority pollutants, as well as grain-size and total organic carbon. Volatile organics are not a chief concern for NOAA since they do not present a great risk for the biota for which NOAA is concerned. Specific areas of expanded investigations include testing sediment as well as surface water at the three locations identified at sites 1, 2, and 3, and sediments from the deep area of Beaver

Pond. At sites 8 and 9, background sediment samples may be necessary to interpret the results. The representatives of the Navy, in response, explained that they do plan to expand the level and range of its investigation. Sharon Christopherson offered the assistance of NOAA in this matter.

At this point, Tony Allen, Project Manager for E.C. Jordan began a site by site discussion beginning with Site 2. Site 2 was described as the site of an incinerator and an area for disposal of solid waste and ash from the incinerator. It was the subject of an extended site investigation by E.C. Jordan. Monitoring wells have been installed and E.C. Jordan proposes to install an additional monitoring well and conduct additional sampling. Matt Hoagland of EPA, expressed a concern at this point as to whether a clay layer in the area actually represents the lower vertical extent of contaminant transport. His contention is that the area geology should be adequately and accurately characterized as a first step to determine the path/paths of contaminant migration. He sees data gathering gaps in the existing work plan, which may lead to further questions. The Navy's contention is that their investigation is a phased approach. As a result of a discussion of Mr. Hoagland's concerns regarding site No. 2, the following conclusions were reached:

- 1) Additional geophysical investigation (including magnetometry) will be performed;
- 2) Additional downgradient monitoring wells will be installed;
- 3) A minimum of two (2) "seeps" will be sampled; and
- 4) The range of contaminants analyzed for will be expanded to include the entire Hazardous Substance List.

Sites No. 1 and 3 were next discussed. Site 1 was the primary waste disposal landfill for the Naval base. A number of shallow monitoring wells and one deep well have been installed at this site. Geophysical investigation is planned at this site to determine the extent of waste disposal and to provide information for further study. Resulting

geophysical information will determine any required relocation of wells, location of test pits and borings. It is E.C. Jordan's intent to install additional monitoring wells (deep and shallow) and expand the surface water sampling and analysis associated with this site. Reviewers' comments centered on sampling and analysis plans which would allow location and tracking of landfill leachate contaminated groundwater plumes resulting from this landfill.

One proposal was that the groundwater analysis include standard landfill leachate associated parameters to allow for tracking of a leachate contaminated plume at a lower cost. It was noted that a determination of background contamination levels was important and that the location of a background sampling site would have to be carefully chosen. E.C. Jordan planned the same investigative approach at both Site Nos. 1 and 3. An investigation of seeps will be undertaken, including sampling of five (5) seeps at Site Nos. 1 and 3 in the Mere Brook area.

In summary: 1) surface sampling operations will be extended to include the full Hazardous Substance List (HSL), 2) a "seep survey" will be implemented. 3) two (2) upstream sediment samples will be taken and analyzed, 4) two (2) stream gauging locations on Mere Brook will be chosen and gauges installed, and 5) an additional meeting will take place when new information is available. The Navy representatives stated that a report section will be provided showing the flow path leading to their decisions on the remedial actions proposed for the base.

Site No. 4 was the next discussion item. Site No. 4 consists of a former burial pit for such items as batteries and transformers. Additional work to characterize the source is to be undertaken. The pit is now covered and located under an existing building. Three (3) monitoring wells are installed at the site, but because of a low hydraulic gradient, the direction of flow has not been determined. An additional monitoring well is proposed to determine flow direction and obtain additional chemical

data. If flow direction cannot be determined with an additional monitoring well then a minimum of three (3) piezometers will be installed to determine the groundwater flow direction. A monitoring well is also proposed inside the building to characterize the waste disposal pit, pending Navy facility authorization. Navy representatives agreed to investigate the feasibility of a boring and well inside the building.

The afternoon session began with a brief discussion of Site No. 5 by Tony Allen. He explained why it is not recommended for further study. Pat Zabrocki of the MEDEP and Charlotte Head of the EPA would like to see documentation that this site was closed according to state regulations. There is concern that asbestos at this site and Site No. 6 (an active rubble disposal site) is properly and securely contained.

Site No. 7 was described as being similar to Site No. 4, except for the absence of a building over the pit disposal area. Monitoring wells have been installed but no direction of flow has been determined. Discussion of this site resulted in the following conclusions; 1) two (2) additional monitoring wells will be installed to determine direction of flow and provide additional water quality data, 2) terrain conductivity screening will be conducted, 3) aerial photography records will be investigated by the Navy and EPA to try to delineate source areas; 4) a full Hazardous Substance List (HSL) screening will be conducted at one (1) downgradient well at each site, as a minimum, and 5) well water elevations will be measured with a wetted tape, not an electronic tape.

Site No. 8 was described as a landfill with four (4) monitoring wells located on site. Heavy metals (chromium and cadmium) have been detected in the groundwater. E.C. Jordan proposes to perform additional surface water sampling and analysis. Two (2) additional deep monitoring wells will be installed adjacent to existing shallow wells. Geophysical investigation will be performed to define the extent of waste deposits. A "seep survey" will be performed and full HSL and standard groundwater parameter analysis will be performed on well samples.

Site No. 9 was described as containing contractor and hospital generated wastes, and other wastes. Presently, three (3) monitoring wells exist and samples have been obtained from three (3) surface water locations. Mercury has been found in samples obtained from the site. Xylene found in surface water samples is attributed to contaminated storm water runoff from an adjacent airfield. It is proposed to install two (2) additional monitoring wells and sample two (2) additional surface water locations. Sediment sampling will also be performed. The existing three (3) monitoring wells and surface water locations will be resampled. Full HSL analysis will be performed.

The meeting ended with a discussion of a future meeting schedule. It was decided to meet again on Thursday, July 16, 1987. Details of the meeting time and location will be provided by Charlotte Head before the scheduled meeting date.

LIST OF ATTENDEES

BRUNSWICK NAVAL AIR STATION

6/12/87 Meeting

9:00 AM

<u>NAME</u>	<u>COMPANY</u>	<u>TELEPHONE</u>
Jack Hoar	CDM	(617) 742-5151
Matthew Hoagland	EPA	(617) 223-1908
Pat Zabrocki	MEDEP	(207) 289-2651
Richard Willey	EPA	(617) 565-3648)
Sharon Christopherson	DOC/NOAA	(617) 565-3703
Charlotte Head	EPA	(617) 565-3643
David Webster	EPA	(617) 565-3632
David Epps	U.S. Navy	(215) 897-6280
Robert Kowalczyk	U.S. Navy	(215) 897-6280
William Fisher	E.C. Jordan	(207) 775-5401
Richard E. Wardwell	E.C. Jordan	(207) 775-5401
Tony Allen	E.C. Jordan	(904) 656-1293